

Special Specification 4069

UHMW-PE Fender Pads



1. DESCRIPTION

This Item will govern for the material to be used for UHMW-PE (ultra high molecular weight polyethylene) pads for use on a marine dolphin.

2. MATERIAL

The UHMW-PE provided must conform to the physical properties in accordance with Table 1.

Table 1

Property	Value	Test Method
Molecular Weight	3.5 - 6 million	ASTM D-4020-11
Izod Impact Strength Double notch, 23°C	18 ft.-lb./in. 2 Min	ASTM D-256-10e1
Hardness	65 Durometer Min	ASTM D-2240-15
Tensile Strength Yield Break Elongation @ Break	3000 lb. Min 4500 lb. Min 300% Min	ASTM D-638-14

In addition to the above requirements, stabilize the UMMW-PE material against ultraviolet radiation. Use either virgin or reclaimed material as approved by the Engineer.

Provide the UHMW-PE pads to the dimensions shown in the plans. Perform all machining by the manufacturer prior to delivery to the field. Provide the UHMW-PE pads to the following tolerances listed in Table 2.

Table 2

Pad Size	
Thickness	+1/16"
Width and length	+1/4"
Machining	
Hole location	+0.05"

3. CONSTRUCTION

Install the pads as shown on the plans. Any pads damaged by over tightened bolts or gouges will be replaced at the Contractor's expense.

4. MEASUREMENT

UHMW-PE pads will be measured by each.

5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "UHMW-PE Pads," of the size shown in the plans. This price will be full compensation for all machining, furnishing, and installation of the pads, anchor bolts, and incidentals; and for furnishing tools, equipment, labor, materials and incidentals necessary to complete the work.